



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Davis et al.

Serial No: 09/339,818

Filed: June 25, 1999

For: Linear Cyclodextrin Copolymers

Attorney Docket No. CTCH-P02-012

Art Unit: 1623

Examiner: L.E. Crane

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*Mary Jane DiPalma*  
Mary Jane DiPalma

Commissioner for Patents  
Alexandria, VA 22313-1450

**REPLY UNDER 37 CFR 1.111**

Sir:

This reply is being filed to supplement the previous replies filed in connection with the above application.

Claims 1-3, 6-10, 18, 24-26, 30-34, 44, and 46 constitute the pending claims in the present application. Applicants respectfully request reconsideration in view of the following remarks.

**The Claims Comply with 35 U.S.C. § 103(a)**

Claims 1-3, 7-10, 18, 24-27, 31-32, 44, and 46 are rejected under 35 U.S.C. §102(e) or alternatively under 35 U.S.C. § 103(a) as being anticipated by Kosak '736. Applicants respectfully traverse this rejection to the extent it is maintained over the claims as amended.

In addition to the arguments already of record, Applicants hereby request further consideration of the declaration under 37 C.F.R. 1.131 filed May 2, 2002. The Examiner

previously dismissed this declaration and accompanying Hwang report, as the Examiner has styled it, as not “extend[ing] to the subject matter of the Kosak et al. ‘736 reference.” In light of comments made by the Examiner in the subsequent Office Action, Applicants respectfully remind the Examiner that it is not necessary that the evidence provided with such a declaration extend to the whole of the subject matter claimed. Such a declaration “must establish possession of either the whole invention claimed or something falling within the claim (such as a species of a claimed genus), in the sense that the claim as a whole reads on it. *In re Tanczyn*, 347 F.2d 830, 146 USPQ 298 (CCPA 1965) ... If the affidavit contains facts showing a completion of the invention commensurate with the extent of the invention as claimed is shown in the reference or activity, the affidavit or declaration is sufficient, whether or not it is a showing of the identical disclosure of the reference.... See *In re Wakefield*, 422, F.2d 987, 164 USPQ 636 (CCPA 1970). ... [A]pplicant’s possession of what is shown carries with it possession of variations and adaptations which would have been obvious, at the time, to one of ordinary skill in the art.” MPEP 715.02, emphasis added. Applicants submit that the Hwang report satisfies this standard, as discussed in greater detail below.

As already made of record, the disclosure of Kosak ‘736 is available as prior art only as of its filing date, December 30, 1998 – after the filing date of the parent to the present application, which fully supports the subject matter now being claimed. Accordingly, Kosak is potential prior art under 35 U.S.C. § 102(e) against the present application only to the extent of the disclosure of its parent application, U.S. Patent Application No. 09/067,921, filed April 29, 1998. Applicants provided the Examiner with a second copy of this application at the interview on January 31, 2003.

As previously argued, Applicants have identified only five pages of this priority document that discuss cyclodextrin polymers. Pages 12, 77, 88, and 102 refer only to cyclodextrin polymers generally, and neither teach nor suggest linear cyclodextrin copolymers having the structural and functional features recited in the present claims. Page 31 provides a synthesis protocol for a cyclodextrin polymer. At the interview on January 31, 2003, the Examiner expressed concern that some amount of linear cyclodextrin copolymer might be formed in this reaction. Applicants first direct the

Examiner's attention to the stoichiometry of this reaction – a five-fold excess of BDE to cyclodextrin is used. Thus, as corroborated by the previously submitted Declaration of Ron Breslow, the likelihood that a substantial number of cyclodextrins will be difunctionalized and capable of forming linear polymers is remote at best. Then, the BDE-modified cyclodextrins are treated with lysine to induce polymerization. Under these uncontrolled conditions, branched polymers will be formed instead of the linear cyclodextrin copolymers presently claimed. Any linear polymers that may form will be present only as trace impurities and will not be amenable to isolation even if they could be detected.

Even if, contrary to the binding precedent of the judicial opinions already made of record, such disclosure were sufficient to render the present application anticipated or obvious if present in the prior art, Applicants submit that Kosak is not prior art against the present application in light of the declaration under 37 C.F.R. 1.131. The Hwang report included with the declaration teaches, at the very least, embodiments of the present invention that equal and far surpass any unwitting and accidental result that may be associated with the teachings of Kosak. See, for example, pages 22, 24, 28-30, and 33-34. Indeed, the Hwang report teaches the basic inventive concept – linear polymers of cyclodextrin – as Kosak does not. See *In re Spiller*, 500 F.2d 1170, 182 USPQ 614 (CCPA 1974). Accordingly, Kosak is simply not available as prior art against the present application.

For all the reasons presented above and already made of record, Applicants submit that the present claims are novel and non-obvious over Kosak. Reconsideration and withdrawal of this rejection are respectfully requested.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-951-7000. Should an extension of time be required, Applicants

hereby petition for same and request that the extension fee and any other fee required for timely consideration of this submission be charged to **Deposit Account No. 18-1945**.

Respectfully Submitted,



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Date: June 24, 2003

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